

RESOLUTION NO 150300 REPORT

Financial Incentives and Technical Assistance for
Benchmarking and Energy Efficiency
in Kansas City, Missouri

**PREPARED FOR THE MAYOR AND CITY COUNCIL
OF KANSAS CITY, MISSOURI**

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ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

The Energy Empowerment Ordinance (Ordinance 150299) was approved by the Mayor and City Council on June 4, 2015, preceded by a unanimous adoption of Resolution 150300. Resolution 150300 requires a report to the Mayor and City Council outlining currently available and future potential sources of financial incentives and technical assistance for assessing energy usage and energy efficiency improvements to buildings in Kansas City.

The first three sections of the report -- CURRENT FINANCIAL SOURCES AND TECHNICAL ASSISTANCE, FUTURE FINANCIAL SOURCES AND TECHNICAL ASSISTANCE, and VOLUNTARY PARTICIPATION INCENTIVES -- summarize currently available and potential future sources of financial incentives and technical assistance for property owners to benchmark energy and water use, report benchmarking information, perform energy studies and/or audits and make energy efficiency improvements. Sources of financial incentives and technical assistance are utility companies, governments, and private sector entities. Overall, utility companies in Kansas City are offering rebates for various energy efficiency retrofits, but few state and federal and no city financial incentives are available. The City has affiliated with the Missouri Clean Energy District to make PACE (Property Assessed Clean energy) loans available to commercial building owners in Kansas City. Some private sector entities offer financial resources to assist with energy efficiency improvements. Local utility companies and federal and city governments provide technical assistance programs.

The fourth section -- OUTREACH PLAN -- summarizes the City government's plan to use a Covered Properties List to target outreach to those affected by the Energy Empowerment Ordinance, including a series of educational sessions occurring between 2016 and 2018; a website and list serve; and organization partnering. The outreach goal is to promote benchmarking and energy efficiency improvements; raise awareness of the Energy Empowerment Ordinance and compliance requirements; and encourage voluntary benchmarking and reporting. The Outreach Plan is anchored by a website serving as the communication hub, available in the fall of 2015.

The fifth section -- DEVELOPMENT INCENTIVE RECIPIENT COMPLIANCE -- highlights the significant number of building projects which receive financial incentives in the form of tax abatements and tax-increment-financing from the City, but only those subject to the Energy Empowerment Ordinance are required to benchmark and report their energy and water consumption. The City Council may elect to pass a resolution directing staff to include the Energy Empowerment reporting clause as a requirement in incentive pre-development documents.

REPORT SCOPE

The Energy Empowerment Ordinance (Ordinance 150299) was approved by the Mayor and City Council on June 4, 2015, preceded by a unanimous adoption of Resolution 150300. Resolution 150300 requires a report to the Mayor and City Council outlining currently available and future potential sources of financial incentives and technical assistance for assessing energy usage and energy efficiency improvements to buildings in Kansas City. This report is intended to address the questions and issues outlined in Resolution 150300. A copy of Resolution 150300 is included in the appendix, see [Appendix E](#).

The report is divided into five sections:

- (1) Public and private sources of financial incentives and technical assistance currently available to commercial, institutional, industrial, and multi-family building owners in Kansas City in order to benchmark energy use, perform energy audits, practice retro-commissioning, and make energy efficiency improvements to their buildings.
- (2) Public and private sources of future financial incentives and technical assistance that might be provided to commercial, institutional, industrial, and multi-family building owners in Kansas City in order to perform energy audits, practice retro-commissioning, and make energy efficiency improvements to their buildings.
- (3) Possible incentive and assistance programs to make voluntary benchmarking, reporting and energy efficiency improvements more viable for building owners who voluntarily benchmark and report.
- (4) An outreach plan that identifies for building owners what the City intends to do to promote energy use benchmarking, reporting and energy efficiency improvements.
- (5) Recommendations for how to require recipients of tax abatements, tax increment financing or other financial incentives from the City to benchmark and report energy and water usage in their buildings.

CURRENT FINANCIAL SOURCES AND TECHNICAL ASSISTANCE

Public and private sources of financial incentives and technical assistance currently available to commercial, institutional, industrial, and multi-family building owners in Kansas City in order to benchmark energy use, perform energy audits, practice retro-commissioning, and make energy efficiency improvements to their buildings

A. Utility Financial Incentives & Technical Assistance

Various financial incentives and technical assistance programs are currently provided by the utilities sector. The local utilities sector includes the electric company, Kansas City Power & Light (KCP&L); the natural gas company, Laclede Gas - Missouri Gas Energy Division (MGE); the water company, KCMO Water Services Department (WSD); and central business district of Kansas City district energy network, Veolia Energy (Veolia).

KCP&L

Enacted in 2009, the Missouri Energy Efficiency Investment Act (MEEIA) encourages electric utilities to implement demand-side energy efficiency programs with the goal to achieve customer savings [Missouri General Assembly, Senate Bill 376]. Although voluntary, KCP&L strives to adhere to the new standard.

In support of the policy to value demand-side investments equal to traditional investments in supply and delivery infrastructure and to allow recovery of all reasonable and prudent costs of delivering cost-effective demand side programs, the MEEIA law requires that the Missouri Public Service Commission (MO PSC) shall:

- (1) Provide timely cost recovery for utilities;
- (2) Ensure that utility financial incentives are aligned with helping customers use energy more efficiently and in a manner that sustains or enhances utility customers' incentives to use energy more efficiently; and
- (3) Provide timely earnings opportunities associated with cost-effective measurable and verifiable efficiency savings.

KCP&L has two service areas within Kansas City, KCP&L Missouri (KCP&L-MO) and KCP&L Greater Missouri Operations (KCP&L-GMO). Generally, Kansas City is in the KCP&L-MO service area except the northern most portion of Kansas City in Platte and Clay counties, and the southern most portions in Jackson County, which are in the KCP&L-GMO service area. A Kansas City customer can find their service area by checking their five-digit rate code. Rate codes starting with 'MO' are in the KCP&L-GMO service area, all other rate codes are in the KCP&L-MO service area.

In November 2012, the MO PSC approved a demand side investment mechanism for KCP&L-GMO to recover its program costs, a performance incentive award, and a throughput disincentive. The MO PSC approved a total budget of over \$43 million for KCP&L-GMO

service territory, with a net shared benefit of over \$110 million. KCP&L-GMO's portfolio is projected to save approximately 150,346 MWh in energy for the 36 month period ending December 31, 2015.

In July 2014, the MO PSC approved a demand side investment mechanism for KCP&L to recover its program costs, a performance incentive award, and a throughput disincentive. The MO PSC approved a total budget of over \$19 million for KCP&L-MO service territory, with a net shared benefit of over \$33.7 million. KCP&L-MO's portfolio is projected to save approximately 102,600 MWh in energy for the 18 month period ending December 31, 2015.

Cycle 1 refers to all MO PSC approved KCP&L-MO programs effective through December 31st 2015. **KCP&L offers numerous financial incentives for energy efficiency improvements, primarily in the form of rebates** [KCP&L, Integrated Resource Plan (IRP)]. The rebates include KCP&L-MO standard rebates and custom rebates. For charts of the standard rebate programs, refer to Appendix A. The standard rebates range from installing a reduced watt T8 lamp for \$0.50/lamp, to installing a heat pump water heater (1500 gallons/day) for \$7,500/unit. For energy efficiency improvements not found on the standard rebate list, a commercial customer can apply for a custom rebate. KCP&L custom rebates are available for all KCP&L business customers within the KCP&L-MO and Greater Missouri Operations (GMO) service area. The custom rebate process entails a pre-approval application prior to purchase or installation and a final approval application; the rebate is calculated as the lesser of the buy down to a two-year payback up to 50% of the incremental cost. The total amount of custom and standard rebates that a customer can receive during a program year is limited to the greater of \$250,000 per customer or up to two times the customer's projected annual demand side investment mechanism (DSIM) charge.

In Kansas City, Missouri, KCP&L does not currently offer incentives for benchmarking, retro-commissioning or commercial energy audits, except for single family and duplex owners or duplex residents with the permission of their landlords. That incentive is available to GMO (and MGE) customers as bill credits for conducting an audit and implementing at least one recommended improvement. Customers (single family and duplex owners or duplex residents with the permission of their landlords) who receive services from both KCP&L and MGE can receive up to a maximum of \$1,200 in bill credits while single-utility customers can receive up to \$600 in bill credits.

MGE

MGE programs are developed and overseen by the Energy Efficiency Collaborative (EEC), a consensus-based group consisting of the MO PSC, Office of Public Counsel, Department of Economic Development – Division of Energy, and the Midwest Gas Users Association. The

addition of new programs or enhancements to current programs are reviewed and approved by the EEC.

MGE offers several financial incentives for energy efficiency improvements, primarily in the form of rebates. MGE's rebate program year is October 1 to September 30. During a program year, the total rebate for a commercial or industrial customer, per account, is limited to \$100,000. Energy audits are eligible for a rebate if the audit identifies an efficiency measure that is subsequently implemented and rebated. Audit rebates are available for facilities less than 25,000 square feet only. Two prescriptive rebate programs are offered to MGE's non-single family customers [MGE, 2015] (see [Appendix B](#) for details). The Water and Central Heating Residential Rebate program offers incentives for a variety of high efficiency equipment. The Commercial and Industrial Energy Efficiency Rebate Program is available to all MGE customers paying commercial energy rates. Rebates for these programs range from installing a programmable thermostat for the lesser of \$40 or 50% of the equipment cost to installing a gas boiler (hot water; more than 1,000,000 Btu/h; 83% TE) for up to \$3,000 per unit.

For projects that do not qualify under the prescriptive path, customers may apply to the Custom Rebate program. These financial incentives are assessed using the societal benefit/cost test, as defined in the latest edition of the California Standard Practice Manual for Economic Analysis of Demand-Side Programs and Projects. Custom projects require pre-approval prior to purchase and installation. Retro-Commissioning, boiler replacement, controls and other measures can qualify for custom rebates. More information can be found at www.betterheatingnow.com.

MGE offers energy audit rebates for non-residential customers in facilities less than 25,000 square feet and retro-commissioning within the Custom Rebate program, but does not offer rebates for benchmarking.

WSD

No available financial incentives for benchmarking, water audits or water efficiency improvements are currently offered by the WSD. No general technical assistance programs are available, though WSD offers a variety of educational programs for schools and organizations.

Veolia

Veolia offers both financial incentives and technical assistance to their customers. Financial incentives are available to customers making energy efficiency improvements to their buildings and are allowed for under the Missouri Energy Commission. An example of technical assistance is sharing energy usage information directly to Portfolio Manager through a web service Application Programming Interface (API). Veolia is currently the only Kansas City Utility to offer this service (see the Governmental Financial Incentives & Technical Assistance sub-section

below for more information on Portfolio Manager). More information on financial incentives can be accessed by contacting Veolia for details.

No financial incentives are currently provided for benchmarking, performing energy audits or retro-commissioning.

B. Governmental Financial Incentives & Technical Assistance

Various financial incentives and technical assistance programs are currently provided by the governmental sector, which includes the Federal Government, the State of Missouri (Missouri) and the City of Kansas City (Kansas City). Financial resources are also included in this section.

Federal Government

The Federal Government provided several financial incentives and technical assistance programs for all building owners to assist benchmarking, reporting and energy efficiency improvements.

The United State Department of Agriculture (USDA) has a **Rural Energy for America Program (REAP)** providing guaranteed loan financing and grant funding to agricultural producers and rural small businesses (USDA). REAP was created by the 2008 Farm Bill and was reauthorized by the 2014 Farm Bill. Eligible recipients are agricultural producers with at least 50% of their gross income coming from agricultural operations or small businesses in eligible rural areas. The City of Kansas City does not include have rural areas as defined by the program, but agricultural producers located in Kansas City may be eligible. Funds may be used for the purchase, installation and construction of renewable energy systems, and energy efficiency improvements. Eligible energy efficiency improvements include, but are not limited to, high efficiency heating, ventilation and air conditioning (HVAC); insulation; lighting; doors and windows; and the replacement of energy-inefficient equipment. Energy efficiency grants are available for \$1,500 to \$250,000 for up to 25% of the project cost, and loan guarantees for up to 75% of total eligible project costs. The next application deadline for REAP grants is November 2, 2015.

A governmental incentive for energy audits was identified, applicable to homeowners in multi-family dwellings. Congressional **Senate Bill 601: Energy Efficiency Tax Deduction**¹ enables any taxpayer who paid a certified Division of Energy auditor to complete a home energy audit to apply for a tax deduction. Deductions cannot exceed \$1,000 per year for a single filing or \$2,000 per year for a joint filing [MDED, “Home Energy Audits”].

Regarding technical assistance, the Department of Energy includes an **Office of Energy Efficiency & Renewable Energy (EERE)**. This department accelerates development and

¹ Because this program is expected to expire on December 31, 2020, this incentive is both a present and future incentive.

facilitates deployment of energy efficiency and renewable energy technologies and market-based solutions that strengthen U.S. energy security, environmental quality, and economic vitality [DOE, 2015]. Technical assistance includes research on emerging technologies, a Better Building Challenge, and analytic tools. For more information, visit <http://energy.gov/eere/efficiency>.

The **U.S. Environmental Protection Agency (EPA)** provides technical assistance through **ENERGY STAR**, a voluntary program that helps businesses and individuals save money and protect our climate through superior energy efficiency [EPA, 2015]. Their resources are substantial and can be found at www.energystar.gov/buildings. Resources include guidance for improving energy performance, programs for earning recognition, the predominate benchmarking tool (Portfolio Manager, described below), and communication tool kits. ENERGY STAR also provides training, which is outlined in this report under the OUTREACH PLAN, EPA ENERGY STAR Training.

The **ENERGY STAR Portfolio Manager** tool is an online tool to measure and track energy and water consumption, as well as greenhouse gas emissions for one building or a portfolio of buildings [EPA(b), 2015]. Portfolio Manager is best known for its energy benchmarking capabilities. By entering a building's energy consumption information and operational use details for the building, the tool tracks over 100 metrics and provides comparisons of the building's performance against a yearly baseline, national medians, and similar buildings in a portfolio. Portfolio Manager can also assess building energy and water use; manage a building's utility data; set investment priorities; verify and track savings; and share performance data in templates and custom reports.

Missouri

The Missouri Department of Economic Development, Division of Energy offers an **Energy Loan Program** for energy-saving investments [MDED, "Energy Loan Program"]. Eligible recipients are public schools (K-12), city and county government, public and private higher education institutions, and public and private not-for-profit hospitals. The next loan cycle for the 2016 fiscal year offers a 2.75% interest rate. Loan applications can be submitted from September 1, 2015 through November 30, 2015. The loan amount per applicant ranges from \$10,000 to \$1,000,000. Loans are repaid from energy savings, with a maximum repayment term of 10 years including principal and interest. According to the 2015 fiscal year loan award announcement, \$8,581,227 was approved for 28 applicants with an estimated savings of \$1,086,513.

Property-Assessed Clean Energy (PACE) financing allows property owners to borrow money for renewable energy and energy efficiency systems. Missouri's Clean Energy District (MCED) was formed in January of 2011 as a political subdivision following the enactment of the PACE Act of Missouri [HB 1692 Missouri Clean Energy District]. Property owners are provided capital

for qualifying projects, and repay the loan over a period up to 20 years by an annual payment on their property tax bill. The PACE assessment is tied directly to a property, secured by a senior lien on the property. Eligible property types are commercial, industrial, agricultural, multi-family, not-for-profit and public facilities. While PACE financing for residential properties is currently on hold, on August 24, 2015 President Obama announced an executive order to unlock PACE financing for single family homes.

On October 17, 2013 the City Council of Kansas City adopted Ordinance No. 130764, authorizing the City to join the MCED in order to make PACE financing available to commercial building owners in Kansas City. Details regarding the operation of MCED can be found at www.mced.mo.gov.

In July 2015, the Missouri Energy Initiative (MEI) launched a second Clean Energy District, called Show Me PACE. MEI is currently seeking additional municipalities to join this statewide organization and city staff is evaluating Show Me PACE in order to provide a recommendation to the City Council regarding the city's affiliation. Program funding is provided through private capital sources.

Kansas City

Although rebates and other financial incentives were previously funded by the City through the Energy Works KC grant from the U.S. Department of Energy, no financial incentives are currently provided by the local government. **Technical assistance is provided by the Kansas City Energy Project (KC CEP).**

The City Energy Project (CEP) launched in 2014 and is a national initiative to create healthier and more prosperous American cities by improving the energy efficiency of large buildings [CEP, 2015]. Kansas City, Missouri was competitively selected to join this effort with the formation of the KC CEP. Working in partnership, the CEP and the City support innovative, practical solutions that cut energy waste, boost the local economy, reduce harmful pollution, and keep Kansas City a leading city in the Heartland. The KC CEP programs were tailored to improve energy efficiency and reduce waste in large buildings across the community. More information on the KC CEP can be found at <http://kcenergyproject.org>.

C. Private Financial Incentives & Technical Assistance

Various financial incentives and technical assistance programs are currently provided by the private sector. Financial resources are also included in this section.

Private financing is available through traditional banks and third parties. A listing of local firms offering financing can be found in the **Kansas City Energy Vendor Database** hosted by the U.S. Green Building Council (USGBC) Central Plains Chapter,

www.usgbccentralplains.org/cityenergydatabase. The most common type of third party financing is an Energy Service Company (ESCO). ESCOs are non-profit or commercial businesses that act as project developers to provide energy efficient design solutions and improvements, who often guarantee an amount of energy cost savings [National Association of Energy Services Companies (NAESCO)]. ESCOs often provide an energy audit; arrange financing; engineer the project; install equipment; and monitor energy savings for building owners.

Operating leases are an option for specific equipment such as lighting and mechanical equipment. Similar to an ESCO, operating leases typically require no upfront costs and project savings are greater than the lease payments.

Traditional commercial banking, ESCO financing, and operating leases allow for the use of local utility rebates.

FUTURE FINANCIAL SOURCES AND TECHNICAL ASSISTANCE

Public and private sources of future financial incentives and technical assistance that might be provided to commercial, institutional, industrial, and multi-family building owners in Kansas City in order to perform energy audits, practice retro-commissioning, and make energy efficiency improvements to their buildings

A. Utility Financial Incentives & Technical Assistance

Future financial incentives and technical assistance programs are under consideration by the utilities sector, including the electric utility, Kansas City Power & Light (KCP&L); the natural gas utility, Laclede Gas - Missouri Gas Energy Division (MGE); the water utility, KCMO Water Services Department (WSD); and central business district of Kansas City district energy network, Veolia Energy (Veolia).

KCP&L

Recently, on August 28, 2015, KCP&L-MO and KCP&L-GMO filed a three year plan (2016-2018 or Cycle 2) [KCP&L IRP].² In this filing, KCP&L-MO proposes a total budget of \$50.1 million with shared benefits of \$128 million and KCP&L-GMO proposes a total budget of \$53.2 million. Projected energy savings are estimated to be 234,400 MWh for KCP&L-MO and 232,357 MWh for KCP&L-GMO.

Cycle 2 refers to all KCP&L-MO proposed programs to be effective January 1 2016 to December 31 2018. KCP&L filed its Cycle 2 portfolio on August 28, 2015. The standard and custom business energy efficiency rebate program remains relatively the same as Cycle 1; however, KCP&L is proposing a flat \$/kWh incentive for the custom program. In addition, **KCP&L proposed three new business programs, which include Strategic Energy Management, Block Bidding, and Small Business Direct Install.**

KCP&L has expanded the current standard program offerings to include a wider range and more comprehensive list of measures. The standard program offers a more streamlined approach for common rebate measures found in both retrofit and new construction applications. For energy efficiency improvements not found on the standard rebate list, a commercial customer can apply for a custom rebate. KCP&L custom rebates are available for all KCP&L business customers within the KCP&L-MO and Greater Missouri Operations (GMO) service area. The custom rebate process entails a pre-approval application prior to purchase or installation and a final approval application; the rebate is calculated on a cost per kWh based on first year estimated savings. The total amount of custom and standard rebates that a customer can receive during a program year is limited to the greater of \$500,000 per customer or up to two times the customer's projected annual demand side investment mechanism (DSIM) charge.

² Ibid.

There is a retro-commissioning component to KCP&L's Strategic Energy Management (SEM) program. Participants will receive a cost per kWh based on first year estimated savings for qualifying operational and maintenance (O&M) upgrades. There currently are no available incentives for energy audits or benchmarking. However, as part of KCP&L's expanded outreach, energy assessments (base and ASHRAE level I & II audits) are available for customers participating in any of the MEEIA programs through program implementer CLEAResult.

On the residential side, KCP&L is proposing a Whole Home Audit program, as well as a Low Income Multi-Family program. A Whole Home Efficiency program was developed for residential single and multifamily customers along with an income eligible multifamily program offering.

These proposed programs will need to be negotiated and approved by the MO PSC. Stakeholders will engage in negotiations with KCP&L on their future energy efficiency programming, so all of these programs and level of funding and rebates outlined in [Appendix C](#) are subject to change after submission of this report.

MGE

MGE will continue to offer their broad portfolio of energy efficiency programs including the Residential Weatherization Program, Home Performance with Energy Star, Water and Central Heating Residential Rebates, Commercial and Industrial Standard Rebates, and Custom Rebates. Enhancements will be developed, including a new website and intake methodology to improve customer accessibility of program deliverables. Energy education will be a focus, with initial workshops for trade allies to reinforce program offerings. MGE is also enhancing an online portal for residential customers to view historic gas consumption and establish energy savings goals for their properties. MGE will work toward co-delivering energy efficiency programs with KCP&L, including considerations for a Low Income Multifamily Direct Install program and Whole House Efficiency program.

MGE programs are developed and overseen by the Energy Efficiency Collaborative (EEC), a consensus-based group consisting of the Missouri Public Service Commission, Office of Public Counsel, Department of Economic Development – Division of Energy, and the Midwest Gas Users Association. The addition of new programs or enhancements to current programs are reviewed and approved by the EEC. The Office of Environmental Quality is in regular contact with the Energy Efficiency Program Specialist at MGE who will provide the Office with updates about future programs as they are available.

WSD

No future financial incentives or technical assistance programs for benchmarking, water audits, or water efficiency improvements are being planned by WSD.

Veolia Energy

Veolia will continue to offer both financial incentives and technical assistance to their customers. Financial incentives will be available to customers making energy efficiency improvements; contact Veolia for details. Veolia will continue sharing customer's energy usage information directly to Portfolio Manager. No financial incentives are currently planned for benchmarking, performing energy audits or retro-commissioning.

B. Governmental Financial Incentives & Technical Assistance

Future financial incentives and technical assistance programs under consideration by the governmental sector are rather limited. This includes the Federal Government, the State of Missouri (Missouri) and the City of Kansas City (Kansas City).

Federal Government

Future governmental incentives and/or assistance include **House Bill 311: High Performance Energy Benchmarks** for a benchmarking incentive and **Senate Bill 601: Energy Efficiency Tax Deduction**³ for an energy audit incentive. The High Performance Energy Benchmarks bill mandates each Missouri public school district to establish an energy benchmark beginning September 1, 2015 for each building owned by the district [State of Missouri, 2014]. The bill provides free technical assistance for the web-based tool, Portfolio Manager, to help manage benchmarking.

The **Energy Savings and Industrial Competitiveness (ESIC)** Act of 2015, a reintroduction and updated version of the prior Shaheen-Portman Act, is intended to promote energy savings in residential and industrial buildings, and for other purposes [Congress.gov, 2015]. A portion became law on April 30, 2015 as the Energy Efficiency Improvement Act of 2015. This bill requires the General Services Administration (GSA) to develop and publish model leasing provisions to encourage building owners and tenants to use greater cost-effective energy and water efficiency measures in commercial buildings. Another requirement is that the Environmental Protection Agency (EPA) must develop a voluntary Tenant Star program within the Energy Star program, and that the DOE must maintain a database for storing and making energy-related information on commercial and multifamily buildings publically available.

On August 3, 2015, President Obama and the EPA announced the **Clean Power Plan**, providing standards for power plants and customized goals for states to cut their carbon pollution [US EPA, 2015]. The Clean Energy Incentive Program has been proposed as part of the Clean Power Plan. This voluntary program would make additional Emission Rate Credits (ERCs) available to states to encourage early reductions from zero-emitting wind or solar power and energy efficiency projects, including “extra credit” for energy efficiency projects in low income communities.

³ Because this program is expected to expire on December 31, 2020, this incentive is both a present and future incentive.

Missouri

There were no programs identified as under consideration by Missouri.

Kansas City

Regarding technical assistance, the City intends to provide assistance to building owners as they prepare to comply with the benchmarking and reporting requirements of the Energy Empowerment Ordinance and to those building owners who opt to voluntarily benchmark and report their energy and water use. In addition, through the City Energy Project, extensive outreach and technical assistance will be provided to building owners prior to their compliance deadlines in the Ordinance. The City is also working collaboratively with the Institute for Market Transformation (IMT), Natural Resources Defense Council (NRDC) and local stakeholders to establish an Energy Efficiency Help Center to provide technical assistance focused on improving energy efficiency, including benchmarking and assistance with the City's Energy Empowerment Ordinance.

Regarding financial assistance, current constraints of the city budget make it unlikely that any direct financial incentives will be provided to building owners for benchmarking and energy efficiency improvements in the 2016-2017 Fiscal Year (May 1, 2016 – April 30, 2017). However, possible future affiliation with the new Show Me PACE program might make additional financial resources available to building owners in KC for energy efficiency improvements.

Some CEP AC members have suggested that the City consider the following financial incentives for building owners who benchmark and report energy and water use in their buildings:

1. Reduced plan review and permitting fees;
2. Business license tax credits for all tenants in participating buildings;
3. E-tax credits for all building owners and tenants in participating buildings;
4. Abatement of water and sewer rate increases for participating buildings;
5. City-backed financing for qualified improvements; and
6. Possible Utility Franchise Fee restructuring/decoupling or use of a portion of the city's utility tax revenues to provide funding for energy efficiency financial incentives.

The City does not intend to provide financial incentives for benchmarking given the reasonable cost and effort associated with benchmarking, including the free online ENERGY STAR Portfolio Manager tool. In addition, it does not seem appropriate for the City to provide financial incentives to building owners for actions that help them identify opportunities to save money on their utility costs.

In future years, if City revenues and expenses allow, the City may consider whether it is reasonable and viable to offer financial incentives that complement those offered by local

utilities and federal and state governments. Since energy efficiency improvements are one of the few investments building owners can make that provide an attractive return-on-investment (through operational cost savings) during ownership, potential financial incentives will need to be carefully evaluated and justified for cost-effectiveness and value to the city (i.e. serving a public purpose). In any consideration, priority would likely be given to low-income multi-family housing, public schools, not-for-profit hospitals, and other non-profit entities who offer services to promote social equity and environmental quality in the community.

C. Private Financial Incentives & Technical Assistance

Future financial incentives and technical assistance programs may be considered by the private sector. However, it is very difficult to anticipate future activities and services. While we anticipate new market driven offerings, there is not enough information to include any details at this time.

VOLUNTARY PARTICIPATION INCENTIVES

Identify possible incentive and assistance programs to make voluntary benchmarking, reporting and energy efficiency improvements more viable for building owners who voluntarily benchmark and report

A. Utility Financial Incentives & Technical Assistance

No financial incentives or technical assistance programs for benchmarking, reporting and energy efficiency improvements are currently provided by the Kansas City utilities sector explicitly for building owners who voluntarily benchmark and publically report their benchmark. Building owners may be eligible for the energy efficiency financial incentives presented under the CURRENT FINANCIAL SOURCES AND TECHNICAL ASSISTANCE and FUTURE FINANCIAL SOURCES AND TECHNICAL ASSISTANCE sections above. Regarding technical assistance, customer inquiries to the utilities would be referred to the technical assistance programs provided by ENERGY STAR and the Kansas City Energy Project, which are described in the CURRENT FINANCIAL SOURCES AND TECHNICAL ASSISTANCE.

B. Governmental Financial Incentives & Technical Assistance

No financial incentives or technical assistance programs for benchmarking, reporting and energy efficiency improvements are currently provided by the government sector explicitly for building owners who voluntarily benchmark and publically report their benchmark. Building owners may be eligible for the energy efficiency financial incentives presented under the CURRENT FINANCIAL SOURCES AND TECHNICAL ASSISTANCE and FUTURE FINANCIAL SOURCES AND TECHNICAL ASSISTANCE sections above. Building owners would be eligible for the government sector technical assistance programs presented under the CURRENT FINANCIAL SOURCES AND TECHNICAL ASSISTANCE sections above as they are available for all building owners, including those who voluntarily benchmark and publically report their benchmark, to assist benchmarking, reporting and energy efficiency improvements.

C. Private Financial Incentives & Technical Assistance

No financial incentives or technical assistance programs are currently provided by the private sector explicitly for building owners who voluntarily benchmark and publically report their benchmark. Building owners who voluntarily benchmark may be eligible for the financial incentives and technical assistance programs presented in the CURRENT FINANCIAL SOURCES AND TECHNICAL ASSISTANCE and FUTURE FINANCIAL SOURCES AND TECHNICAL ASSISTANCE sections above.

OUTREACH PLAN

Prepare an outreach plan that identifies for building owners what the City intends to do to promote energy use benchmarking, reporting and energy efficiency improvements

The goals of the outreach are to:

- 1) Promote benchmarking and energy efficiency improvements
- 2) Raise awareness of the Energy Empowerment Ordinance and compliance requirements
- 3) Encourage voluntary benchmarking and reporting (early adopters and non-covered properties)

The Outreach Plan has four components:

- 1) Covered Properties List
- 2) Educational sessions
- 3) Website and list serve
- 4) Organization partnering

A. Covered Properties List

The Covered Properties List is a table of buildings subject to the Kansas City Missouri Energy Empowerment Ordinance (Ordinance) and the owner on record that is required to comply.

- 1) Draft Covered Properties List - The draft Covered Properties List will be posted on Open Data KC by September 28, 2015. The City acknowledges there are likely to be missing and incorrect entries, and will have instructions posted on how to correct information, submit a missing Covered Property, or request to be removed from the Covered Properties List.
- 2) Mailings - Three mailings of postcards and/or letters will be sent to all covered properties to provide awareness of the Ordinance; the website and list serve; and the availability of educational sessions. The City anticipates these mailings in November, 2015; January, 2016; and January, 2017.
- 3) Email - Email will be the City's main mode of communication with owners of covered properties, including the mode of communication between mailings and after the third mailing. Therefore, gathering accurate email addresses of owners will be prioritized. The email addresses of owners will not be included in the draft Covered Properties List posted online.
- 4) Phone Calls - In an effort to increase awareness of the Ordinance and accuracy of owner contact information, phone calls will be made to a portion of owners on the Covered Properties List after the first mailing.
- 5) Top 10 Owners - We will reach out to the top 10 owners (defined as owners who own the highest number of covered properties) by phone and/or email to share a notice of the Ordinance; website and list serve; and the availability of educational sessions. We will also offer one-on-one and small group custom compliance/reporting training to these individuals.

B. Educational Sessions

Educational sessions will include a variety of workshops hosted locally, on-demand training, and live training webinars, many of which are hosted by the EPA. A target of 50 educational sessions will be held from March, 2016 and April, 2018 (26 months), 50 percent of which will cover Ordinance compliance and reporting. All educational sessions will be listed on the Ordinance website, and those that include compliance and reporting training will be shared on the list serve for the Ordinance.

Workshops

Workshops will be organized by the City or through the Kansas City Energy Project. There will be no cost to attend workshops, but advance registration may be required. Workshops will include topics such as benchmarking, ENERGY STAR Portfolio Manager, retro-commissioning, energy audits, identifying energy efficiency improvements, financing programs, and financial incentives. An effort will be made to conduct several of the compliance and reporting trainings virtually, similar in format to a webinar.

- 1) Compliance/Reporting Training
 - a. Must be affiliated with a covered property to attend.
 - b. Session is 30 minutes in length.
 - c. Held throughout Kansas City, Missouri.
 - d. Held monthly.
- 2) Basic Portfolio Manager (includes setting up an account, creating a building profile, and benchmarking training)
 - a. Anyone (metro wide) may attend.
 - b. Session is 60 minutes in length.
 - c. Held throughout metro, with a target of at least 50% in Kansas City Missouri.
 - d. Held quarterly.
 - e. We will work to partner with private consultants/contractors to host some sessions as 90 minute lunch/breakfast-and-learns.
- 3) Benchmarking & Energy Efficiency
 - a. Anyone may attend.
 - b. Session is 60 minutes in length.
 - c. Held throughout the metro, with a target of 50% in Kansas City, Missouri.
 - d. Held quarterly.
 - e. We will work to partner with private consultants/contractors to host some sessions as 90 minute lunch/breakfast-and-learns.
- 4) Targeted Session on Benchmarking & Energy Efficiency.
 - a. Specific groups may include churches, schools, parking garages, retail/strip commercial, big box commercial, multifamily, etc.
 - b. Anyone may attend.
 - c. Session is 60 minutes in length.

- d. Held throughout metro, with a target of 50% in Kansas City, Missouri.
- e. Held quarterly.
- f. We will look to partner with private consultants/contractors to host some sessions as 90 minute lunch/breakfast and learns.

On-Demand Training

The workshops described above will be held live. There will also be two types of on-demand training created and accessible on the ordinance website.

- 1) Recorded Trainings – The compliance/reporting training workshop will be recorded and placed on the ordinance website. Dependent on demand and resources, additional workshops (live and virtual) will also be recorded.
- 2) How-To – A short, graphics-based explanation of the compliance and reporting requirements will be created and posted to the ordinance website prior to the start of the educational sessions.

EPA ENERGY STAR Training

ENERGY STAR offers training on a range of benchmarking and energy efficiency topics, including Portfolio Manager, commercial building design, ENERGY STAR recognition, and improving building energy performance. Trainings are provided as recorded webinars, live webinars, express videos, and print handouts. A full listing of ENERGY STAR training resources is available at www.energystar.gov/buildings/training.

- 1) Recorded Trainings
 - a. These sessions are available on demand and offer high-quality, in-depth trainings led by EPA's experts.
 - b. Sessions are typically one hour in length. At the time of this report 50 topics were available. Popular topics include:
 - a. Portfolio Manager 101
 - b. Portfolio Manager 201
 - a. How to Apply for the ENERGY STAR
 - b. What You Should Know About Financing Energy Efficiency Upgrades
- 2) Live training sessions
 - a. These training sessions are led by EPA's experts and include time for attendees to ask questions. Available live training sessions are listed on the website. A monthly email summarizing upcoming live training sessions is also available.
 - b. Sessions are typically one hour in length. At the time of this report, 24 sessions covering 12 topics over a three month period were scheduled. Upcoming topics include:
 - c. Portfolio Manager 101
 - d. Portfolio Manager 201
 - e. Portfolio Manager 301

- c. Delivering Value for Warehouses with ENERGY STAR
 - d. Benchmarking Water/Wastewater Treatment Facilities in Portfolio Manager
- 3) Express Videos – These sessions are five minute YouTube videos providing animated demonstrations on using Portfolio Manager, including basic functionality, sharing data and reporting.
 - 4) Handouts – This resource is a growing collection of downloadable resources providing high-quality summary information on a wide range of benchmarking and energy efficiency topics.

C. Website and List Serve

The City's main communication and distribution of information regarding the Energy Empowerment Ordinance will be in electronic format.

Website

The City will provide a website to serve as the hub of communication on the Ordinance. The target launch date will be in late 2015. Website features will likely include:

- 1) Ordinance #150299, Companion Resolution #150300, Resolution #150300 Report, Energy Empowerment Rules;
- 2) Energy Empowerment Ordinance Fact Sheet and FAQ;
- 3) Covered Property list, including request for Building ID and exemptions information;
- 4) Compliance information and checklist, including reporting guidance materials;
- 5) Training and workshops, including descriptions, calendar and sign-up information;
- 6) Summary of available ENERGY STAR resources with applicable links;
- 7) Portfolio Manager instructions, FAQ, and applicable links;
- 8) Annual report (when available);
- 9) Help center and assistance information; and
- 10) Information, links and resources on the value of benchmarking and energy efficiency.

List Serve

The City will use Mail Chimp (or similar) to build a list serve for the Ordinance. Information shared on the list serve will include upcoming reporting deadlines, compliance training, and annual report availability. Preferably, emails will be limited to once per month. The list serve may not be permanent, but will be active through at least the 2019 reporting period (Summer 2020).

D. Organization Partnering

The City will reach out to a broad group of organizations and ask them to share pertinent information on the Energy Empowerment Ordinance with their members. The distributed information will be brief and summary-oriented (e.g., notice of the Ordinance; where to find more information) and direct interested parties to visit the website for more details and to sign up for the list serve to stay informed. The City will ask organizations to distribute information on their list serve, post in their newsletter, mention at a meeting, etc. It will also be noted that knowledgeable presenters are available to speak briefly at their meetings to share this information and answer questions pertaining to the Ordinance. Organizations the City intends to contact are:

- 1) Apartment Association of Kansas City (AAKC)
- 2) Association of Energy Engineers, Kansas City Chapter (AEE)
- 3) American Institute of Architects, Kansas City (AIA)
- 4) American Society of Heating, Refrigerating and Air Conditioning Engineers, Kansas City Chapter (ASHRAE)
- 5) Asian Chamber of Commerce
- 6) Black Chamber of Commerce of Greater Kansas City
- 7) Bridging The Gap
- 8) The Builders' Association
- 9) Building Owners and Managers Association of Metro Kansas City (BOMA)
- 10) Built Environment Partners Kansas City (BEP)
- 11) Clay County Economic Development Council
- 12) Greater Kansas City Chamber of Commerce (Greater KC Chamber)
- 13) Greater Kansas City Hispanic Chamber of Commerce
- 14) Hispanic Chamber of Commerce
- 15) International Facility Management Association, Kansas City Chapter (IFMA)
- 16) Institute of Real Estate Management (IREM)
- 17) Kansas City Industrial Council (KCIC)
- 18) Kansas City Manufacturing Network (KCMN)
- 19) Kansas City Power & Light (KCP&L)
- 20) Kansas City Regional Association of Realtors (KCRAR)
- 21) Labor-Management Council of Greater Kansas City
- 22) Laclede Gas - Missouri Gas Energy Division (MGE)
- 23) Metropolitan Energy Center (MEC)
- 24) Mid-America Regional Council (MARC)
- 25) Midwest Energy Efficiency Alliance (MEEA)
- 26) Minority Contractors Association of Greater Kansas City
- 27) Missouri Interfaith Power & Light (MO IP&L)
- 28) National Native American Chamber of Commerce
- 29) Nonprofit Connect

- 30) Northland Regional Chamber of Commerce
- 31) Northeast Kansas City Chamber of Commerce
- 32) Platte County Economic Development Council
- 33) South Kansas City Chamber of Commerce
- 34) The Southtown Council
- 35) United States Green Building Council, Central Plains Chapter (USGBC)
- 36) KCMO Water Services Department
- 37) Veolia Energy

The City will create a brief summary of the Energy Empowerment Ordinance, including who must comply, website URL, and a schedule of educational sessions. Organizations can request a stack of these to distribute at their meeting and/or events.

DEVELOPMENT INCENTIVE RECIPIENT COMPLIANCE

Recommendations for how to require recipients of tax abatements, tax increment financing or other financial incentives from the City to benchmark and report energy and water usage in their buildings

The City utilizes financial incentives, such as tax abatement and tax redirection, as tools to support the redevelopment of blighted areas, and to attract, retain and expand businesses in the City. Projects requesting City of Kansas City financial assistance for economic development purposes are evaluated through a lens of the project's impact on the community, both positive and negative. When a project can demonstrate economic, social and environmental sustainability considerations have been taken (e.g. LEED certification), then the project is looked upon more favorably for financial assistance.

The Energy Empowerment Ordinance provides the means for existing large buildings in the City to demonstrate their impact on the community, a step that is especially valuable to those receiving local financial assistance to become more aware of their energy and water usage through benchmarking and reporting.

Many of the buildings that receive local financial assistance already fall under the purview of the Energy Empowerment Ordinance due to their square footage being greater than 50,000 square feet. However, it is recommended that the smaller projects (under 50,000 square feet) receiving local financial assistance also be held to the same standard by benchmarking and reporting the energy and water usage in their buildings. This provision can be inserted into the predevelopment documents that detail the role and expectations of the entity receiving the financial assistance. The table below provides examples of which predevelopment document could contain the Energy Empowerment reporting clause for the corresponding economic development tool.

Incentive Tool:	Predevelopment Document:
Chapter 100	Lease Document
Planned Industrial Expansion Area	Development Agreement
Tax Increment Financing	Development Agreement
Land Clearance Redevelopment Area	Redevelopment Agreement
Chapter 353	Development Agreement

The City Council may elect to pass a resolution directing staff to include the Energy Empowerment reporting clause as a requirement in incentive pre-development documents.

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Appendixes

Appendix A: Present Financial Incentives and Technical Assistance for Utilities (KCP&L)

Appendix B: Present Financial Incentives and Technical Assistance for Utilities (MGE)

Appendix C: Future Financial Incentives and Technical Assistance for Utilities (KCP&L)

Appendix D: Kansas City Energy Project Advisory Committee

Appendix E: Resolution 150300

Appendix A

Present Financial Incentives and Technical Assistance for Utilities (KCP&L)

Table A-1. Kansas City Power & Light-MO Standard Business Rebates¹

KCP&L-MO Heating, Ventilating, and Air Conditioning (HVAC) Retrofits		
*Rebates are capped at 50% of measure costs (equipment + labor).		
Existing Condition	Proposed Retrofit	Rebate
No Duct Insulation	HVAC Duct Insulation	\$30/ton
Standard Water Cooled Chiller	Water Cooled Chiller – less than 75 tons	\$25/ton
Standard Water Cooled Chiller	Water Cooled Chiller – greater than 300 tons	\$40/ton
Standard Packaged Air Conditioner	Packaged Air Conditioner (1 Phase) – less than 65,000 Btu/hr	\$40/ton
Standard Packaged Air Conditioner	Packaged Air Conditioner – greater than 760,000 Btu/hr	\$40/ton
Standard Packaged Heat Pump	Packaged Air Sourced Heat Pump (1 phase) – less than 65,000 Btu/hr	\$77/ton
Standard Packaged Heat Pump	Packaged Water Sourced Heat Pump –65,000 to 135,000 Btu/hr	\$73/ton
Standard Thermostat	Programmable Thermostat	\$35/t-stat
KCP&L-MO Lighting Retrofits		
No Occupancy Sensor	Occupancy Sensor	\$0.11/connected watt
Incandescent Fixture	CFL Fixture	\$22/fixture
T12 8ft 1 lamp	T8 8ft 1 lamp – 800 Series lamp	\$9/fixture
T12 8ft 2 lamp	T8 HO 8ft 2 lamp – 800 Series lamp	\$16/fixture
CFL Exit Sign	LED Exit Sign	\$10/fixture
Incandescent Exit Sign	LED Exit Sign	\$10/fixture
High Pressure Sodium Fixture	Ceramic Metal Halide Fixture	\$45/fixture
High Pressure Sodium Fixture	T5 HO High bay 4ft 6 lamp (2 fixtures)	\$300/fixture
Metal Halide Fixture	Ceramic Metal Halide Fixture	\$45/fixture
Metal Halide Fixture	T5 HO High bay 4ft 6 lamp	\$175/fixture
Incandescent Screw In	CFL Screw in Lamp	\$2/fixture

¹ "KCPL-MO Standard Measures." KCP&L (n.d.): n. pag. *Business Energy Efficiency Rebates*. KCP&L, 1 Jan. 2015. Web. 1 July 2015. <<http://www.kcpl.com/~media/Files/Save Energy and Money/BEER verticals/KCPL-Rebates.pdf>>.

KCP&L-MO Miscellaneous Retrofits		
Standard Desktop	ENERGY STAR V5.0 Desktop System	\$5/unit
Standard Server	ENERGY STAR V5.0 Small Scale Server	\$10/unit
No Networked Power Management	Networked Power Management Enabling for PCs	\$15/computer
No Networked Power Management	Networked Power Management Enabling for Copiers	\$34/copier
KCP&L-MO Pumps/Drives/Motors Retrofits		
Standard Pool Pump	Pool Pump – High Efficiency	\$92/unit
Standard Pool Pump	Pool Pump Variable Speed Drive	\$150/unit
Standard Motor	Energy Efficient Motor – 1 to 5 HP	\$4.70/hp
Standard Motor	Moto for Compressed Air – 1 to 5 HP	\$10/hp
No VSD on Pump or Fan	Variable Speed Drive for Pump or Fan – 1.5 HP	\$868.50/unit
No VSD on Pump or Fan	Variable Speed Drive for Pump or Fan – 50 HP	\$4,475/unit
Standard Motor for Fan	Motor for Fan – 1 to 5 HP	\$5.50/hp
KCP&L-MO Refrigeration/Food Service Retrofits		
Standard Beverage Machine	ENERGY STAR Beverage Machine	\$140/unit
No Controller for Machine	Vending Miser Controller for Beverage machine	\$50/sensor
Standard Hot Foot Holding Cabinet	ENERGY STAR Hot Food Holding Cabinet	\$640/unit
Standard Refrigerator	High Efficiency Refrigerator – less than 20 cu ft	\$125/unit
Standard Refrigerator	High Efficiency Refrigerator – greater than 48 cu ft	\$450/unit
Standard Freezer	High Efficiency Freezer – less than 20 cu ft	\$75/unit
Standard Freezer	High Efficiency Freezer – greater than 48 cu ft	\$350/unit
Standard Walk In Refrigerator	High Efficiency in Refrigerator	\$1,000/unit
Standard Walk In Freezer	High Efficiency in Freezer	\$1,000/unit
No Controls	Anti-Sweat Humidistat Controls	\$40/control
No Curtain	Strip Curtain for Walk in Refrigerator/Freezer	\$9.80/sq ft

KCP&L-MO Water Heating Retrofits		
No Pipe Insulation	Water Heater Pipe Wrap/Insulation	\$16/6 ft length of pipe
No Water Heater Insulation	Water Heater Tank Blanket	\$20/unit
Standard Water Heater	Electric Storage Tank Water Heater (>0.94 Efficient)	448/unit
Standard Water Heater	Heat Pump Water Heater – 500 gallons/day	\$3,500/unit
Standard Water Heater	Heat Pump Water Heater – 1500 gallons/day	\$7,500/unit
Standard Water Heater	Tankless Water Heater	\$250/unit

Appendix B

Present Financial Incentives and Technical Assistance for Utilities (MGE)

Table B-1. Missouri Gas Energy: Water Heating and Central Heating Residential Rebate Program ¹

MGE Water Heating Rebates *EF (Energy Factor): Appliances with an EF closer to 1, the more energy efficient it is.		
Equipment	Proposed Retrofit	Rebate
Gas Tankless (less than 2 gallons)	0.82 EF or higher	\$300
Gas Storage (56-100 gallons)	0.77 EF or higher	\$350
Gas Storage (20-55 gallons)	0.67 EF or higher	\$200
MGE Central Heating Rebates *Programmable Thermostats like the 5-2 and 5-1-1 allow one weekday setting and one (for the 5-2) or two (for the 5-1-1) separate settings for the weekend when the hours spend in that room will likely be different. **AFUE (Annual Fuel Utilization Efficiency): the percent the appliance actually uses towards its intended function.		
Programmable Thermostat	7 day programmable, (5+2, or 5-1-1)	\$25 or 50% of the equipment cost, whichever is lower
Gas Furnace	96% AFUE or greater	\$300
Gas Furnace	92% to 95.99% AFUE	\$200
Gas Boiler	90% AFUE or greater	\$300
MGE Integrated Space and Water Heating Systems Rebates		
High efficiency boiler with side-arm tank	90% AFUE or greater	\$450
High efficiency tankless water heater	0.82 EF or higher	\$450

¹ "Water & Central Heating Residential Rebate Program." (n.d.): n. pag. *Missouri Gas & Energy*. Web. 1 July 2015. <<http://www.betterheatingnow.com/pdf/Rebate/15-MGE-Residential-Rebate-Application-May2015.pdf>>.

Table B-2. Missouri Gas Energy Commercial & Industrial Standard Rebates²

Heating Equipment		
Equipment or Service	Minimum Efficiency/Requirement	Rebate
Gas Furnace	92% AFUE	\$200 per unit
Gas Furnace	94% AFUE	\$250 per unit
Low-Intensity Infrared Heater	Electronic Ignition / Interior Installation Only	\$300 per unit
Condensing Unit Heater	90% Thermal Efficiency (TE)	\$300 per unit
HTHV Direct-Fired Gas Heater	90% Thermal Efficiency (TE)	\$500 per unit
Programmable thermostat	7-Day Programmable	50% of unit cost up to \$40 per unit
MGE Boilers		
Gas Boiler (Hot Water)	≤ 300,000 Btu/h: 85% AFUE	Up to \$750 per unit
	>300,000 to <1,000,000 Btu/h: 83% TE	Up to \$1,500 per unit
	≥1,000,000 Btu/h: 83% TE	≥ Up to \$3,000 per unit
*Exact Hot Water Boiler Rebates are determined based upon size and efficiency		
Gas Boiler (Low Pressure Steam ≤ 15 PSIG)	≤300,000 Btu/h: 83% AFUE	Up to \$750 per unit
	>300,000 to <1,000,000 Btu/h: 83% TE	Up to \$1,500 per unit
	≥1,000,000 Btu/h: 83% AFUE	Up to \$3,000 per unit
*Exact Low Pressure Steam Boiler Rebates are determined based upon size and efficiency		
Gas Boiler (High Pressure Steam > 15 PSIG)	≤300,000 Btu/h: 81.5% AFUE	Up to \$750 per unit
	>300,000 to <1,000,000 Btu/h: 81.5% TE	Up to \$1,500 per unit
	≥1,000,000 Btu/h: 81.5% TE	Up to \$3,000 per unit
*Exact Hot Water Boiler Rebates are determined based upon size and efficiency		

² Commercial and Industrial Standard Rebates." *MGE - ENERGY SENSE*. N.p., n.d. Web. 01 July 2015. <<https://mgestandard.programprocessing.com/>>.

Boiler Components		
Continuous Modulating Burner	Retrofit to Existing Boiler Only	25% of equipment cost up to \$15,000 per burner
Vent or Primary Air Damper	Retrofit to Existing Boiler Only	50% of the equipment cost up to \$500 per boiler
Advanced Load Monitoring (ALM) Boiler Control	Retrofit to Existing Hot Water Space-Heating Boiler Only	\$2000 per control
Outdoor Temperature Reset (OTR) Boiler Control	Retrofit to Existing Hot Water Space-Heating Boiler Only	\$200 per control
Boiler Tune-Up		
Gas-Fired Boiler Tune-Up	Eligible for tune up every two years	50% of installed cost up to \$500 per boiler
	Completed Checklist	
	Flue-Gas tape(copy) or results	
Gas-Fired Boiler Tune up (Non-Profit Customers*)	Eligible for tune up every two years	75% of installed cost up to \$750 per boiler
	Completed Checklist	
	Flue-Gas tape(copy) or results	
Steam Traps		
Steam-Trap Replacement	Maximum of 25 failing traps per program year. Must include steam-trap survey/failure study report	50% of the equipment cost up to \$2,500 per program year
Water Heating Equipment		
Gas Condensing Storage Water Heater	>75,000 to ≤500,000 Btu/h input	\$250 per unit
	90% TE	
Gas Instantaneous Water Heater (< 2 gal.)	.82 EF	\$300 per unit

Food Service Equipment		
Steamer	ENERGY STAR® qualified	50% of the equipment cost up to \$475 per unit
Fryer	ENERGY STAR® qualified	50% of the equipment cost up to \$350 per unit
Griddle	ENERGY STAR® qualified.	50% of the equipment cost up to \$400 per unit
	(Top and bottom surfaces of clamshell models must be gas)	
Convection Oven	ENERGY STAR® qualified	50% of the equipment cost up to \$200 per unit
Combination Oven	ENERGY STAR® qualified	50% of the equipment cost up to \$500 per unit
Conveyor Oven	New oven with baking efficiency > 42%. Idle energy consumption rate < 57,000 Btu/h utilizing ASTM standard F1817.	50% of the equipment cost up to \$300 per unit
Rack Oven - single rack	New oven with baking efficiency ≥ 50% utilizing ASTM standard 2093.	50% of the equipment cost up to \$500 per unit
Rack Oven - double rack	New oven with baking efficiency ≥ 50% utilizing ASTM standard 2093.	50% of the equipment cost up to \$1000 per unit
Infrared Charbroiler	Natural gas charbroiler with infrared burners** ASTM compliant	50% of the equipment cost up to \$300 per unit
Infrared Salamander Broiler	Natural gas salamander broiler with infrared burners** ASTM compliant	50% of the equipment cost up to \$200 per unit
Infrared Rotisserie Oven	Natural gas rotisserie oven with infrared burners** ASTM compliant	50% of the equipment cost up to \$300 per unit
Kitchen Demand Control Ventilation (KDCV)	KDCV control system must utilize variable frequency drives and sensors to vary exhaust and/or gas-fired makeup air flow(s). Natural Gas Heating required within kitchen space	\$300 per system

Low Flow Pre-Rinse Spray Nozzle	Replacement Only, GPM rating of 1.6 or less (Maximum of Two Nozzles)	50% of equipment cost up to \$100 per nozzle
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AFUE = Annual Fuel Utilization Efficiency, EF = Energy Factor, TE = Thermal Efficiency. Ratings are provided by the manufacturer and can be found at: www.ahridirectory.org

***Non-Profit Customers are defined as government agencies, public school districts, or other customers that demonstrate qualification as a 501(c) (3) charity or benevolent corporation as defined by RSMo 352.010.**

****New installations or replacement of non-infrared equipment**

Appendix C

Future Financial Incentives and Technical Assistance for Utilities (KCP&L)

Whole House Efficiency

Summary

The Whole House Efficiency Program consists of 3 Options:

Option 1: Home Energy Audit. The customer receives an in-home energy audit and direct installation of low-cost measures. The audit will identify potential efficiency improvements. The low-cost measures to be installed include: faucet aerator, low-flow showerhead, advanced power strip, water heater tank wrap, hot water pipe insulation and CFLs.

Option 2: Weatherization Measures. Customers that have completed Tier 1 are eligible to receive incentives for the purchase and installation of air sealing, insulation and ENERGY STAR® windows.

Option 3: HVAC Equipment. Customers are eligible to receive incentives for qualifying HVAC equipment installed by a participating contractor. Customers are not required to participate in Tier 1 or 2. Qualifying measures include heat pump water heaters, ECM furnace fans, heat pump ductless mini splits, central air conditioners and heat pumps. Early retirement incentives are provided to customers with central air conditioners and/or heat pumps in operable condition and at least 5 years of age.

Customers that install multiple items will be provided a bonus incentive per the requirements listed in the chart.

Requirements	Bonus Incentive
Air Sealing and ENERGY STAR® Windows	\$300
Tier 2 + CAC/HP	\$100
Tier 2 + Early Retirement CAC/HP	\$150
Tier 2 + HP Replace Electric Resistance	\$200

Residential customers that rent a residence must receive the written approval of the homeowner/landlord to participate in the program.

The program goals include:

- Demonstrate persistent energy savings.
- Encourage energy saving behavior and whole house improvements.
- Help residential customers reduce their electricity bills.
- Educate customers about the benefits of installing high efficiency HVAC equipment.
- Develop partnerships with HVAC contractors to bring efficient systems to market.

This is a new program for the 2016-2018 implementation cycle.

Measures & Incentives

The measures and incentives were set for planning purposes and may be modified to reflect market conditions. Incentives may be modified to account for new installation versus retrofit. Customers could pay up to \$50 to receive the home energy audit and direct measure installation.

Option 2 Incentive per Unit

Measure	Unit	Incentive per Unit
Air Sealing	per sq. ft.	\$0.08, up to \$300
Ceiling Insulation, R-38	per sq. ft.	\$0.30, up to \$500
Wall Insulation, R-5	per sq. ft.	\$0.65, up to \$150
ENERGY STAR® Windows	per Window	\$75, up to \$750

Option 3 Incentive per Unit

Measure	Unit	Replace/ New	Early Retirement	Replace Electric Resistance Heat
Heat Pump Water Heater	per Unit	\$500	n/a	n/a
ECM Furnace Fan	per Unit	\$150	n/a	n/a
Heat Pump Ductless Mini-Split	per Unit	\$300	n/a	n/a
SEER ≥15 Central Air Conditioner	per Unit	\$125	\$250	n/a
SEER ≥16 Central Air Conditioner	per Unit	\$200	\$400	n/a
SEER ≥15, HSPF ≥8.5 Heat Pump	per Unit	\$150	\$300	\$800
SEER ≥16, HSPF ≥8.5 Heat Pump	per Unit	\$300	\$600	\$1,000
SEER ≥17, HSPF ≥8.6 Heat Pump	per Unit	\$500	\$900	\$1,200

Bonus Incentive per Customer

Requirements	Bonus Incentive
Air Sealing and ENERGY STAR® Windows	\$300
Tier 2 + CAC/HP	\$100
Tier 2 + Early Retirement CAC/HP	\$150
Tier 2 + HP Replace Electric Resistance	\$200

Income Eligible Multifamily

Summary

Deliver long-term energy savings and bill reductions to income-eligible customers in multi-family housing and multi-family common area energy savings. The program includes 2 tiers:

Tier 1. Multi-Family Kits: Direct installation of low-cost measures for income-eligible homeowners and renters in multi-family housing, at no cost to the participant. The measures installed include: faucet aerator, low-flow showerhead, advanced power strip, hot water pipe insulation and CFL/LEDs.

Tier 2. Multi-Family Common Areas: Installation of lighting measures in multi-family common areas, at no cost to the participant.

Business Energy Efficiency Rebate Standard

Summary

The Business Energy Efficiency Rebate – Standard is designed to help commercial and industrial customers save energy through a broad range of energy efficiency options that address all major end uses and processes. The program will offer standard rebates as well as mid-stream incentives. The measures incentivized, including lighting, HVAC equipment and motors, are proven technologies that are readily available with known performance characteristics.

- **Standard Rebates:** participants select energy efficient equipment from a pre-qualified list. Rebates are issued to participants upon completion of the project and submission of the rebate application.
- **Mid-Stream Incentives:** Trade Allies receive incentives for increasing the sale of qualifying measures.

Measures that are incentivized mid-stream will not be offered as a standard rebate.

Standard participant rebates per program year are limited to the greater of \$500,000 per customer or two-times the customer's projected annual Demand-Side Investment Mechanism (DSIM) charge.

Measures & Incentives

Measure	Unit	Incentive per Unit
Air Sourced AC	per ton	\$50
Air Source HP <135 kBtuh	per ton	\$60
ECM Motors Walk-In Coolers & Freezers	per unit	\$30
ENERGY STAR Beverage Machine	per unit	\$75
Heat Pump Water Heater	per unit	\$500
Low Flow Faucet Aerator	per unit	\$2.50
Packed Terminal AC/HP	per ton	\$5.00
Pipe Wrap/Insulation	per unit	\$15
Programmable Thermostat	per ton	\$2.00
Pumps/Fan, VSD (HVAC only)	per HP	\$220
Reach In Refrigerator/Freezer	per unit	\$100
Strip Curtains	per unit	\$125
Directional LED Bulb (<15W)	per unit	\$15
Directional LED Bulb (≥15W)	per unit	\$25
High Bay Fluorescent Fixture (HP T8 >4ft)	per unit	\$115
High Bay Fluorescent Fixture (HP T8 ≤4ft)	per unit	\$75
High Bay Fluorescent Fixture w/ HE Electronic Ballast (T5 >4ft)	per unit	\$75
High Bay Fluorescent Fixture w/ HE Electronic Ballast (T5 ≤4ft)	per unit	\$45
LED Exit Sign	per unit	\$12
LED Flood Light	per unit	\$15
LED High & Low-Bay Fixture	per unit	\$75
LED Recessed Fixture (1ft x 4ft)	per unit	\$15

LED Recessed Fixture (2ft x 2ft)	per unit	\$10
LED Recessed Fixture (2ft x 4ft)	per unit	\$20
LED Refrigerator Case Light	per unit	\$40
Lighting Optimization - Remove 4ft Lamp from T8 System	per unit	\$10
Lighting Optimization - Remove 8ft Lamp from T8 System	per unit	\$10
Low Wattage T8 Lamp	per unit	\$1
Omnidirectional LED Bulb (<10W)	per unit	\$10
Omnidirectional LED Bulb (\geq 10W)	per unit	\$15
Photocell Occupancy Sensor	per unit	\$35
Screw In - CFLs	per unit	\$1
Screw In - LEDs	per unit	\$10
Wall-Mount Occupancy Sensor	per unit	\$20

Appendix D

Kansas City Energy Project Advisory Committee

Members of the Kansas City Energy Project Advisory Committee are appointed by the City Manager, Troy Schulte.

Committee Co-Chairs

Scott Taylor, Kansas City Councilmember

Dennis Murphey, Chief Environmental Officer

Appointed Committee Members

D. Jensen Adams, Kansas City Public Schools

Warren Adams-Leavitt, Metropolitan Energy Center

Terry Akins, IBEW Local 124

Sam Alpert, Construction Users Council and BOMA

Neal Angrisano, Burns & McDonnell

Dave Barber, JE Dunn

Jeremy Bechtold, St. Luke's Medical Center

Cathy Bennett, GKC Chamber of Commerce

Terry Berkbuegler, Think Confluence

Joanne Collins, Climate Protection Steering Committee

Tom Corso, MC Realty

Shaylyn Dean, Laclede Gas - Missouri Gas Energy Division

Steve DeGarmo, Truman Medical Center

Steve DiGiacinto, Hallmark Cards

Amanda Graor, Mid-America Regional Council

Ashok Gupta, NRDC

Matt Heinrich, Rockhurst University

R. Kaye Johnston, University of Missouri – KC

Brad Nies, U.S. Government Services Administration

TBD, Economic Development Corp – KC

Gary Schlotzhauer, Kessinger Hunter

Kim Winslow, KCP&L

Program Staff

Dennis Murphey, Office of Environmental Quality

Gerald (Jerry) Shechter, Office of Environmental Quality

Jennifer Gunby, Institute for Market Transformation

Julie Peterson, The Energy Foundation & GKC Chamber of Commerce

JC Martel, Institute for Market Transformation

COMMITTEE SUBSTITUTE FOR RESOLUTION NO. 150300

Directing the City Manager to prepare and submit a report to the Mayor and City Council regarding incentives for assessing energy usage and making energy efficiency improvements to buildings in Kansas City.

WHEREAS, the City of Kansas City, Missouri (City) desires to promote energy efficiency improvements to buildings in the City; and

WHEREAS, the City has actively participated in a City Energy Project Advisory Committee (CEPAC) comprised of more than 20 representatives of a broad range of stakeholders, including building owners/managers, universities, hospitals, engineering and construction firms, labor, the business community, the City's Environmental Management Commission and Climate Protection Steering Committee, non-profit organizations, Mid-America Regional Council and the U.S. General Services Administration; and

WHEREAS, the CEPAC has been providing feedback regarding energy benchmarking since December 2014; and

WHEREAS, lack of access to financial and technical resources to perform energy audits and to determine cost-effective energy efficiency improvements have been identified as potential impediments to building owners taking such actions; and

WHEREAS, some of the CEPAC participants have requested that the City consider incentives to promote energy efficiency improvements to local buildings; and

WHEREAS, the Mayor and City Council wish to receive information from City staff regarding current incentives available to building owners and future incentives that might be provided to building owners for energy efficiency improvements; NOW THEREFORE,

BE IT RESOLVED BY THE COUNCIL OF KANSAS CITY:

Section 1. That the City Manager is directed to provide, within 120 days of the effective date of this resolution, a report to the Mayor and City Council that identifies:

- a. Public and private sources of financial incentives and technical assistance currently available to commercial, institutional, industrial and multi-family building owners in Kansas City in order to benchmark energy use, perform energy audits, practice retro-commissioning and make energy efficiency improvements to their buildings.
- b. Public and private sources of future financial incentives and technical assistance that might be provided to commercial, institutional, industrial and multi-family building owners in Kansas City in order to perform energy

COMMITTEE SUBSTITUTE FOR RESOLUTION NO. 150300

audits, practice retro-commissioning and make energy efficiency improvements to their buildings.

- c. Possible incentive and assistance programs to make voluntary benchmarking, reporting and energy efficiency improvements more viable for building owners who voluntarily benchmark and report.
 - d. An outreach plan that identifies for building owners what the City intends to do to promote energy use benchmarking, reporting and energy efficiency improvements. Such plan to be first reviewed by the CEPAC.
 - e. Recommendations for how to require recipients of tax abatements, tax increment financing or other financial incentives from the City to benchmark and report energy and water usage in their buildings.
-



Authenticated as Passed

Sly James, Mayor

Marilyn Sanders, City Clerk

MAY 21 2015

Date Passed